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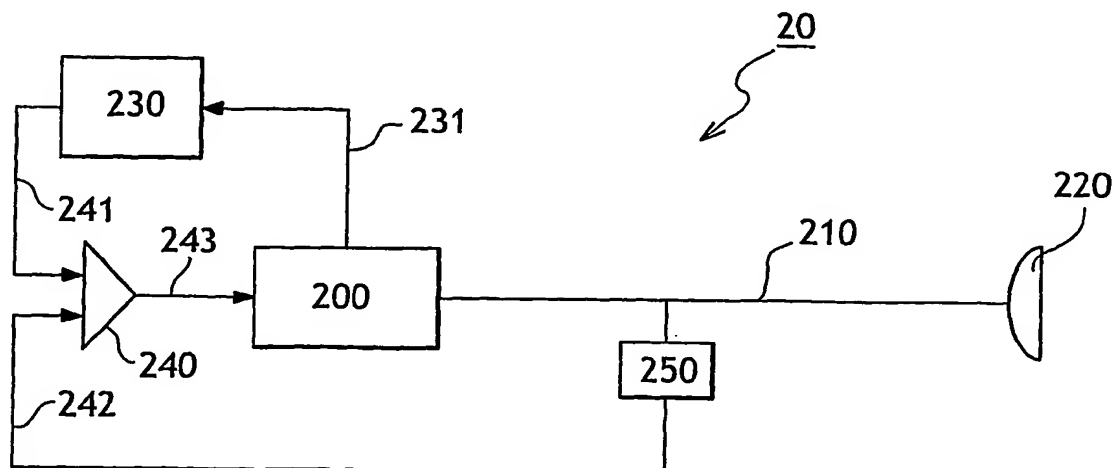
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(54) Title: BREATHING ASSISTANCE DEVICE, AND METHOD OF REGULATION



(57) **Abstract:** This invention relates to, according to a first aspect, a breathing assistance device consisting of: a turbine to generate a flow of pressurised respiratory gas, a duct to carry the pressurised gas to a patient, means of controlling the gas pressure capable of elaborating a pressure setting for the turbine, characterised in that the turbine is connected to a speed sensor capable of acquiring a signal corresponding to the rotation speed of a rotating element of the turbine, and the means of controlling include means of calculation linked to said speed sensor in order to elaborate using said signal a pressure setting and to send said pressure setting to the turbine. This invention relates to, according to a second aspect, a method for regulating the pressure of a respiratory gas delivered by a turbine to a patient, the method comprising elaborating a pressure setting for the turbine, characterised in that said pressure setting is elaborated using a signal representative of the rotation speed of a rotating element of the turbine.